

REMARKS

The Official Action mailed November 18, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on November 26, 2003; and August 18, 2005. However, the Applicants still have not received acknowledgment of the Information Disclosure Statement filed on March 4, 2004 (received by OIPE March 8, 2004). The above-referenced Information Disclosure Statement appears in the Image File Wrapper. The Applicants respectfully request that the Examiner provide an initialed copy of the Form PTO-1449 evidencing consideration of this Information Disclosure Statement.

Claims 1-7, 9-15, 17-23, 25-31 and 33-39 are pending in the present application, of which claims 1, 9, 17, 25 and 33 are independent. Claims 1, 9, 17, 25 and 33 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1, 2, 7, 9, 10, 15, 17, 18, 23, 25, 26, 31, 33, 34 and 39 as anticipated by U.S. Patent No. 5,268,679 to Shannon. The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Official Action asserts that "the language 'over' in regards to the light shutters and sensors enables the claims to read on prior art in which all of the claimed elements are on one or two substrates and there are several substrates below (at least

two)" (page 2, Paper No. 10312005, emphasis in original). In response, claims 1, 9, 17, 25 and 33 have been amended for clarity.

Specifically, independent claim 1 has been amended to recite a second optical shutter provided over a second substrate and under a first substrate, a first optical sensor provided over a third substrate and under the second substrate, a second optical sensor provided over the third substrate and under the second substrate, a first electronic circuit provided over the third substrate and under the second substrate, and a second electronic circuit provided over the third substrate and under the second substrate.

Independent claim 9 has been amended to recite a first optical sensor provided over a second substrate and under a first substrate, a second optical sensor provided over a third substrate and under the second substrate, a first electronic circuit provided over the second substrate and under the first substrate, and a second electronic circuit provided over the third substrate and under the second substrate.

Independent claim 17 has been amended to recite a first optical sensor provided over a second substrate and under a first substrate, a second optical shutter provided over the second substrate and under the first substrate, a second optical sensor provided over a third substrate and under the second substrate, a first electronic circuit provided over the second substrate and under the first substrate, and a second electronic circuit provided over the third substrate and under the second substrate.

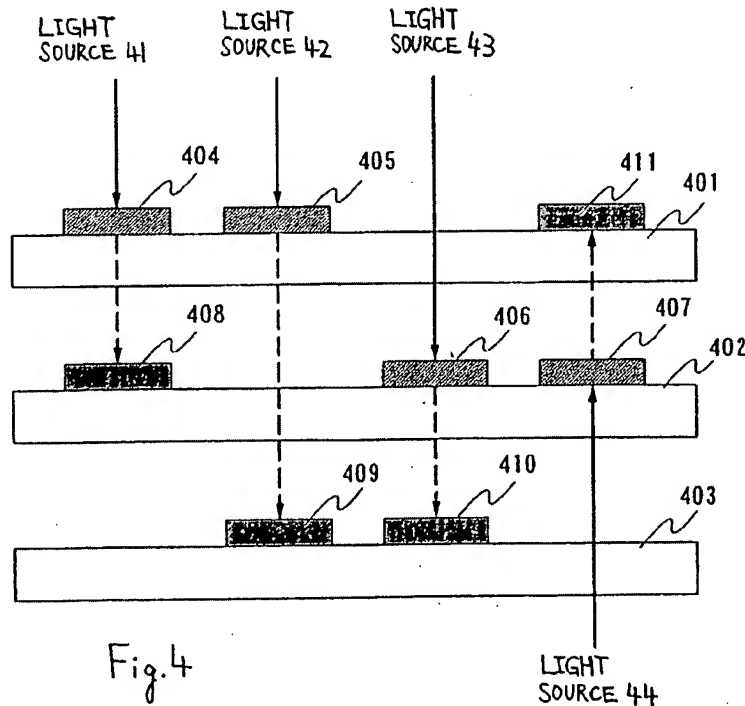
Independent claim 25 has been amended to recite a first optical sensor provided over a second substrate and under a first substrate, a second optical shutter provided over the second substrate and under the first substrate, and a first electronic circuit provided over the second substrate and under the first substrate.

Independent claim 33 has been amended to recite a second optical shutter provided over a second substrate and under a first substrate, a first optical sensor provided over a third substrate and under the second substrate, a first electronic circuit provided over the third substrate and under the second substrate.

The Applicants respectfully submit that Shannon does not teach the above-referenced features of the present invention, either explicitly or inherently.

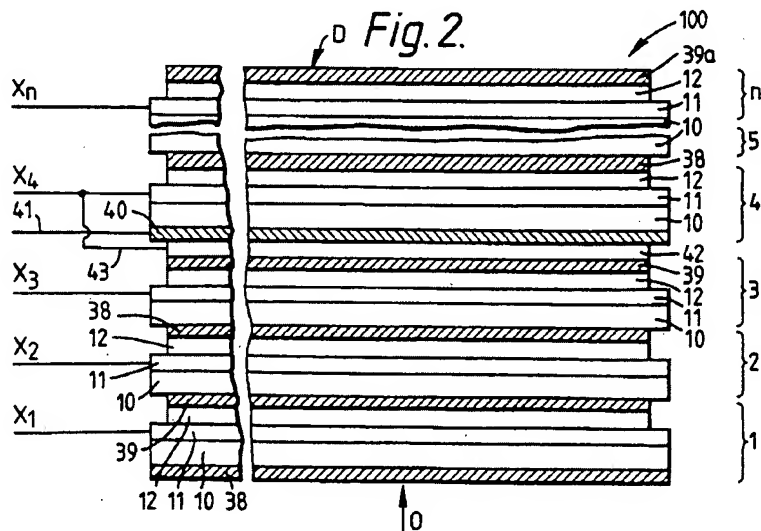
Also, the Official Action asserts that "[t]he use of light 'source' as used in the instant specification does not appear to be used as light coming from a different emitter, but light which has come from a different place" (page 2, Paper No. 10312005). The Applicants respectfully disagree with the Examiner's interpretation and provide the following explanation to facilitate the Examiner's understanding of the present invention.

For example, as noted above, independent claim 25 recites a first optical sensor provided over a second substrate and under a first substrate, a second optical shutter provided over the second substrate and under the first substrate, and a first electronic circuit provided over the second substrate and under the first substrate. As shown in Figure 4 (reproduced below), a first optical shutter corresponds with optical shutter 404; a first optical sensor corresponds with optical sensor 408; a second optical shutter corresponds with optical shutter 407; and a second optical sensor corresponds with optical sensor 411.



Light source 41 is used for the optical shutter 404 and the optical sensor 408. Light source 44 is used for the second optical shutter 407 and the second optical sensor 411. A first light from the first light source 41 is applied from above. Also, a second light from the second light source 44 is applied from below. Therefore, light source 44 is separate from light source 41.

In Shannon, as shown in Figure 2 (reproduced below), a light beam 0 provides uniform background illumination and is inputted into an optical data processing device 100.



Shannon does not teach separate plural light sources, either explicitly or inherently.

Further, each of independent claims 1, 9, 17, 25 and 33 recites two separate light sources. For example, in Figure 4 of the subject application, light sources 41-44 are four separate light sources, and in Figure 3 of the subject application (reproduced below), light sources 31-34 are four separate light sources.

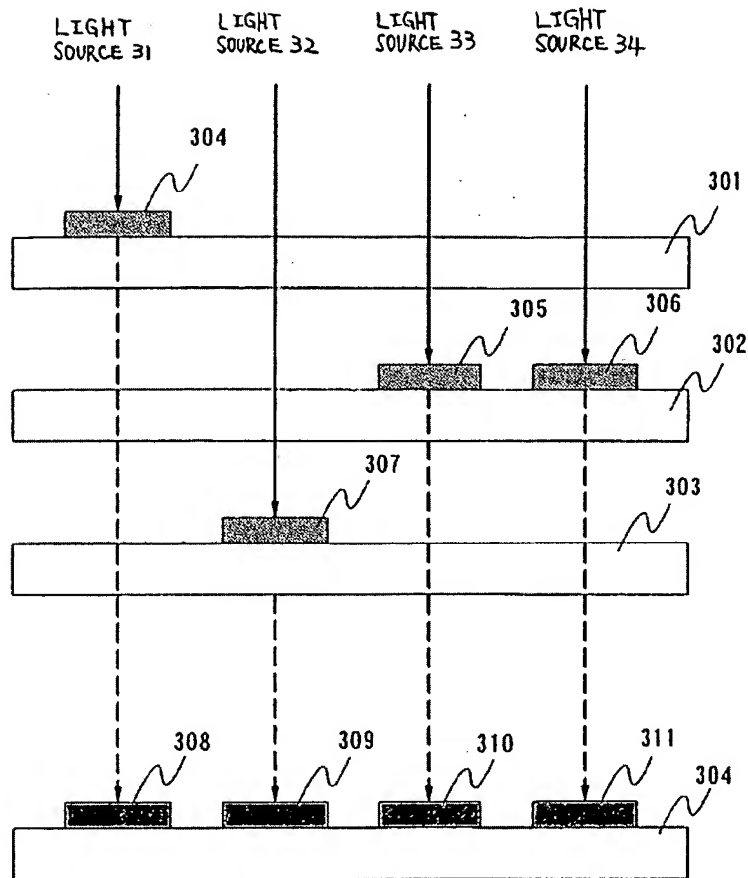


Fig. 3

As noted above, Shannon does not teach separate plural light sources, either explicitly or inherently.

Since Shannon does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

The Official Action rejects dependent claims 3-6, 11-14, 19-22, 27-30 and 35-38 as obvious based on the combination of Shannon, U.S. Patent No. 5,583,570 to Yamada, U.S. Patent No. 5,491,571 to Williams et al. and U.S. Patent No. 5,738,731 to Shindo et al. The Applicants respectfully submit that a *prima facie* case of obviousness

cannot be maintained against the independent claims of the present application, as amended.

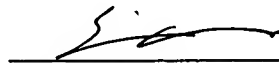
As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Please incorporate the arguments above with respect to the deficiencies in Shannon. Yamada, Williams and Shindo do not cure the deficiencies in Shannon. The Official Action relies on Yamada, Williams and Shindo to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Yamada, Williams and Shindo to allegedly teach the "level of crystallinity" for "the circuits and photodiodes" of Shannon (pages 9-10, Paper No. 10312005). However, Shannon, Yamada, Williams and Shindo, either alone or in combination, do not teach or suggest the features of the amended independent claims as noted in detail above or that Shannon should be modified to have separate plural light sources. Since Shannon, Yamada, Williams and Shindo do not teach or suggest all the claim limitations, a *prima facie* case of

obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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